WOODY ORNAMENTAL AND SHELTER PLANTS FOR THE NORTH CENTRAL REGION

1956-1960

Five Year Report on Regional Plantings*

Ligustrum vulgare L. (P.I. 107630)

Common or European Privet

The plants under consideration in this report originated from seed collected by Edgar Anderson, during the Arnold Arboretum Balkan Expedition, 1934, in a situation of unusual drought and cold, in the region of Sarajevo, Bosnia (Yugoslavia). The seed was assigned P.I. No. 107630 upon arrival at the U.S.D.A. Inspection House, Washington, D. C. The fact that this accession (though not discussed in Farmers' Bulletin 2019) is the only privet which has survived at the Cheyenne Horticultural Field Station, Cheyenne, Wyoming, was a major factor in recommending it for regional trial planting. More than 200 plants were donated by L. R. Sjulin, Inter-State Nurseries, Hamburg, Iowa, for these regional trials.

Description of Common or European Privet

A deciduous or half-evergreen large shrub to 15 feet which often retains its leaves long into the fall. Branches slender, spreading, branchlets minutely pubescent or smooth.

Leaves: Simple, opposite, entire, medium green, 1 1/4-2 3/8 inches, oblong ovate to lanceolate obtuse or acute smooth petiole 1/8-1/4 inch.

Flowers: Perfect, white, small pediceled in terminal panicles 1 1/4-2 1/2 inches long, calyx bellshaped, 4-toothed, corolla salver-shaped, a tube and 4 spreading lobes, stamens, 2 anthers longer than corolla tube, style cylindric, shorter than stamens.

A 1-4 seeded berry-like black drupe subglobose or ovoid 1/4-3/8 inch long.

Outstanding Qualities

- This accession proved to be amenable to successful propagation and handling.
- Long hanging foliage and fruit added to the ornamental value of this shrub.
- Prior experience suggested unusual hardiness.

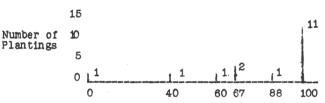
Regional Trial Performance Data

Location of Plantings

The location of the trial plantings can be ascertained from Figure 1.

Survival

Reports indicate perfect stands at Fargo, North Dakota; Brookings, South Dakota; Twin Cities, Waseca, Crookston and Duluth, Minnesota; Madison, Wisconsin; Rose Lake, Michigan; North Platte, Nebr. and on two sites at Ames, Iowa or 11 plantings with full stands throughout the initial five-year period. These and other survival reports are summarized in Figure 2 as the number of plantings by five-year survival percentages.



The number of <u>Ligustrum vulgare</u> (P.I. 107630) plantings grouped by five-year Figure 2. survival percentages.

Initial Losses: Only one 1956 planting of P.I. 107630 sustained first season loss. Two plants at the Highmore, South Dakota planting failed to survive. This loss was successfully replaced the following spring.

<u>Delayed Losses:</u> At Morris, Minnesota one plant was reported dead at the end of the second winter.

At Highmore, South Dakota one plant was observed to be dead following the fifth winter, while four plants were also reported dead at Rosemount, Minnesota.

Growth Evaluation

Average of fifth year shoot growth (inches): The Rose Lake, Michigan plants averaged two inches shoot growth during the fifth year on a depleted planting site. This poor response is in marked contrast to the 24 inches growth recorded for plants at the Twin Cities, Minnesota and Brookings, South Dakota trials. The shoot growth data for reporting stations is summarized in Table 1.

Average fifth year shoot growth of <u>Ligustrum yulgare</u> (P.I. 107630) regional trial Table 1.

Location	Growth (in.)	Location	Growth (in.)
Rose Lake, Mich. Morris, Minn. Ames, Iowa (W) Fargo, N. Dak. Crookston, Minn. Waseca, Minn. Ames, Iowa (N)	6 9 10	North Platte, Nebr. Ames, Iowa (E) Highmore, S. Dak. Twin Cities, Minn. Brookings, S. Dak. Madison, Wis.	16 17 22 24 24 Plants sheared

Average plant size after five years (height-spread (feet): The smallest plant size, 1.e., 2.3 x 1.6 feet was recorded in the Highmore, South Dakota, approximately planting. At Brookings, South Dakota, approximately 150 miles east of Highmore, plants of P.I. 107630 averaged 6.75 x 4.75 feet, while at North Platte, Nebraska the largest plants tested measured 10 x 11 feet. Average height and spread data are shown in Figure 1 by each trial planting location.

Cultural Problems

The accession is apparently tolerant to high alkali soils, for no chlorosis was noted at the Crookston, Minnesota planting. No noteworthy injury by diseases or insects was reported.

^{*}A regional testing program organized as a work plan under the North Central Regional Plant Introduction state-federal cooperative project NC-7 Title: The Introduction, Multiplication, Preserva-tion and Testing of New and Useful Plants of Potential Value for Agricultural and Industrial Uses. Sub-Title of work plan: Woody Ornamental and Shelter Plants for the North Central Region. This report covers plants grown in: Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, South Dakota and Wisconsin.

Planting Recommendations by States

It is noted that P.I. 107630 was reported to be the hardiest L. <u>vulgaris</u> accession yet tested at the Twin Cities, Minnesota trial site. Plants survived the 1958 summer drought and the winter of 1958-59 without injury. The suggested limits for successful planting of this plant introduction are given in Figure 1,

Appropriate Uses

It is expected that this privet may have its greatest use as a hedge plant in parts of the region where it may prove hardier than the widely used L. amurense (Amur River North). Other uses would include its planting as part of the shrub border or in foundation plantings. It apparently has value as a honey plant, for its flowers are visited by many bees. Winter birds often glean the remaining persistant fruit in late winter.

Further Testing of P.I. 107630

This plant introduction merits additional trial in parts of the region where privets have not proven satisfactorily hardy.

Sources of the Introduction

This plant is available through the New Crops Research Branch, and from the Inter-State Nurseries, Hamburg, Iowa.

References

The numbers listed below refer to pertinent references among those included under literature.

2, 3, 4, 13, 14, 21, 22, 24, 25, 32, 35, 39, 53.

